



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,244	03/13/2001	Motoyuki Kato	G5030.0027/P027 9167	
24998	7590 03/15/2004		EXAMINER	
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP 2101 L STREET NW			RUTTEN, JAMES D	
	ON, DC 20037-1526		ART UNIT	PAPER NUMBER
			2122	
			DATE MAILED: 03/15/2004	, 5

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Angliagna/a)			
	•	Application No.	Applicant(s)			
		09/804,244	KATO ET AL.			
	Office Action Summary	Examiner	Art Unit			
		J. Derek Rutten	2122			
Period fo	The MAILING DATE of this communication or Reply	n appears on the cover sheet with the o	correspondence address			
THE   - Exter after   - If the   - If NC   - Failu   Any I	ORTENED STATUTORY PERIOD FOR R MAILING DATE OF THIS COMMUNICATI nsions of time may be available under the provisions of 37 C SIX (6) MONTHS from the mailing date of this communicativ of period for reply specified above is less than thirty (30) days. O period for reply is specified above, the maximum statutory of re to reply within the set or extended period for reply will, by reply received by the Office later than three months after the ed patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may a reply be tiron. a reply within the statutory minimum of thirty (30) day beriod will apply and will expire SIX (6) MONTHS from statute, cause the application to become ABANDONE	nely filed ys will be considered timely. I the mailing date of this communication. ED (35 U.S.C. § 133).			
Status						
1)  🏹	Responsive to communication(s) filed on	13 March 2001.				
•	☐ This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
′=	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
,—	closed in accordance with the practice un	•				
Dispositi	ion of Claims					
4)⊠	Claim(s) 1-5 is/are pending in the applica	tion.				
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	Claim(s) is/are allowed.					
6)⊠	⊠ Claim(s) <u>1-5</u> is/are rejected.					
7)	Claim(s) is/are objected to.					
8)□	Claim(s) are subject to restriction a	and/or election requirement.				
Applicati	ion Papers					
9)⊠	The specification is objected to by the Exa	ıminer.				
•	10)⊠ The drawing(s) filed on <u>13 March 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.					
,	Applicant may not request that any objection t					
	Replacement drawing sheet(s) including the c					
11)[	The oath or declaration is objected to by the	· · · · · · · · · · · · · · · · · · ·				
Priority ι	under 35 U.S.C. § 119					
a)l	Acknowledgment is made of a claim for fo  All b) Some * c) None of:  1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International Beet the attached detailed Office action for	ments have been received. ments have been received in Applicat priority documents have been receiv ureau (PCT Rule 17.2(a)).	ion No ed in this National Stage			
	TO SHO GREEN ON GOING ON GOING HOLD IN	a not of the continue copies flot receive	<del></del>			
Attachmen	(t(c) /					
_	e of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)			
	e of Draftsperson's Patent Drawing Review (PTO-94	8) Paper No(s)/Mail D	ate			
3) 🔲 Infon	mation Disclosure Statement(s) (PTO-1449 or PTO/Ser No(s)/Mail Date		Patent Application (PTO-152)			

#### **DETAILED ACTION**

## **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

# Specification

- 2. The abstract of the disclosure is objected to because a typo in line six results in a lower case "w" in the word "when", which should be capitalized as --When--. Correction is required. See MPEP § 608.01(b).
- 3. The use of the trademark Java has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2122

- 6. Claim 1 recites the limitation "said two steps" in line 6. There is insufficient antecedent basis for this limitation in the claim. For the purpose of further examination, this limitation has been interpreted as --said steps of extracting, resolving, and storing--.
- 7. Claim 2 recites the limitation "said memory referring predetermined data" in line 8.

  There is insufficient antecedent basis for this limitation in the claim. For the purpose of further examination, this limitation has been interpreted as --said result data--.
- 8. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "information" in line 4 of claim 3 is used by the claim to mean "reference field", while the accepted meaning is "knowledge obtained from investigation, study, or instruction." The term is indefinite because the specification does not **clearly** redefine the term. For the purpose of further examination, this term has been interpreted as --reference field--.
- 9. Claim 4 recites the limitation said result data of said resolved reference is stored in a predetermined location in a head code data. This claim is dependent upon claim 3 which recites the limitation said program executing means stores said result data of said resolved reference in a link information. Regarding claim 4, it is not clear whether the result data is stored in "head code data" or "link information" or both. Further, if it is stored in both, it is not clear whether "head code data" is contained within "link information", or vice versa, or if there's some other type of relationship. For the purpose of further examination, this limitation will be interpreted in

Art Unit: 2122

light of the specification page 10 lines 28-29 as --said result data of said resolved reference is stored in a predetermined location determined by head code data--.

10. Claims 3-5 are each further rejected for being dependent upon a rejected claim.

# Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 12. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,815,718 to Tock (hereinafter referred to as "Tock").

As per claim 1, Tock discloses:

A program executing method to execute a program written in an interpreter language (Abstract, lines 1-5: "A method and system for providing an executable module having an address space for storing program data that is to reside in a read-only storage medium and an address space for storing program data that is to reside in a random access memory is herein described."), comprising the steps of:

extracting reference data used for specifying a location to be accessed in a memory, and resolving a reference using said reference data (column 5 lines 56-58:

Art Unit: 2122

"The object module is then transmitted to the linker 136 which generates a memory layout for the classes in the application."; column 5 lines 58-60: "Once the memory layout is determined, the linker 136 resolves all symbolic references and replaces them with direct addresses.");

said reference data, said steps of extracting, resolving, and storing being executed before said program is executed (column 3 lines 19-22: "A browser partitioned in this manner can be initially stored in the read-only memory of the client computer. When the system powers on, the second address space is preloaded into the RAM."; also column 5 lines 65-67: "The output from the linker 136 is a preloadable executable module 306 containing the methods and data for these two address spaces." Comment: The executable module output from the linker contains the result data of the resolved reference. This module is executed only after the steps of extracting, resolving, and storing as referenced above.); and

specifying a location in said memory to be accessed based on said result data of said resolved reference linking to said program through said reference data, when said program is executed which requires to access said memory referring predetermined data (column 2 lines 7-11: "By executing a large portion of the browser from read-only memory, the browser has additional RAM storage to store information-content and executable modules

Art Unit: 2122

that it can obtain from other server computers that the client is in communication with." <u>Comment</u>: In this passage, Tock executes an application built using the result data obtained via the above mentioned steps including resolving references using reference data to produce result data. Execution inherently involves specifying memory locations otherwise the processor would not be able to obtain required data.).

As per claim 2, Tock discloses:

An information processing device provided with a program written in an interpreter language (column 2 lines 53-55: "An application developed in the Java programming language is executed on such a client computer."), comprising:

a storing means to store result data of a resolved reference linking to said program through a reference data to specify a location in a memory to be accessed (column 5 lines 56-58: "The object module is then transmitted to the linker 136 which generates a memory layout for the classes in the application."; column 5 lines 58-60: "Once the memory layout is determined, the linker 136 resolves all symbolic references and replaces them with direct addresses."; also column 5 lines 65-67: "The output from the linker 136 is a preloadable executable module 306 containing the methods and data for these two address spaces."; further, see FIG. 3 element

Art Unit: 2122

306: ROM/RAM; <u>Comment</u>: The executable module contains the result data for specifying memory locations, and is stored as is shown in FIG. 3, in ROM and RAM.);

a program executing means to execute said program, which specifies said location in said memory to be accessed based on said result data of said resolved reference linking to said program through said reference data, when said program is executed which requires access to said result data (column 2 lines 53-55 cited above describes a program executing means. All other limitations in this section have also been addressed in the above passages.).

As per claim 3, the above rejection of claim 2 is incorporated. Tock further discloses:

An information processing device according to claim 2, wherein said program comprises

an object program in byte code and data which represent the content of reference data linked to said program (column 3 lines 46-49; column 4 lines 25-29; column 5 lines 65-67), and

said program executing means stores said result data of said resolved reference in a link reference field provided for linking to said object program (column 9 lines 7-12).

As per claim 4, the above rejection of claim 3 is incorporated. Tock further discloses:

Art Unit: 2122

An information processing device according to claim 3, wherein said link information provided for linking to said object program contains code data of a number of fixed lengths (column 6 lines 22-26), and

said result data of said resolved reference is stored in a predetermined location determined by head code data (column 7 lines 47-49).

As per claim 5, the above rejection of claim 4 is incorporated. Tock further discloses:

An information processing device according to claim 4, wherein said object program and said link information are read out of a ROM at the time of executing said program (column 3 lines 19-20).

#### Conclusion

- 13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,349,344 to Sauntry et al. discloses preloading class files and storage in a ROM. U.S. Patent 6,446,254 to Chapman et al. discloses prelinking an interpreted language program and storing on ROM.
- 14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Derek Rutten whose telephone number is (703) 605-5233. The examiner can normally be reached on M-F 6:30-3:00.

Art Unit: 2122

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jdr

TUAN DAM TUAN DAM EXAMINER